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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/966,404	09/28/2001	Lalitha Agnihotri	US010447	4387
24737	7590	12/09/2005	EXAMINER	
PHILIPS INTELLECTUAL PROPERTY & STANDARDS			PIERRE, MYRIAM	
P.O. BOX 3001			ART UNIT	PAPER NUMBER
BRIARCLIFF MANOR, NY 10510			2654	

DATE MAILED: 12/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/966,404	AGNIHOTRI ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Myriam Pierre	2654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 22 August 2005.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-26 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-26 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                     | Paper No(s)/Mail Date. _____ .  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|  | 6) <input type="checkbox"/> Other: _____ .                                  |

## **DETAILED ACTION**

### ***Response to Amendment***

1. Applicant's amendment filed on 08/22/2005 regarding Office Action of 05/20/2005, the proposed changes are approved by the examiner, amending claims 1-8, 10-11, and 13-26.

### ***Response to Arguments***

2. Applicant's arguments with respect to claims 1-26 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-12, 16-22, 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schulz (6,185,538) in view of Carbonell et al. (5,677,835).

As to claim 1, Schulz teach

A method for processing an audio/video signal and an auxiliary information signal comprising text data that is temporally related to the audio/video signal (col. 5 lines 7-25), said method comprising the steps of:

sequentially analyzing portions of said text data in an original language in which said text data is received; sequentially translating said portions of text data into a target language (col. 5 lines 7-25); and

sequentially analyzing portions of said text data in an original language in which said text data is received (col. 5 lines 7-25)

displaying said portions of translated text data while simultaneously playing the audio/video signal that is temporally related to each of the portions (Fig. 1 and col. 7 lines 20-25).

Schulz does not explicitly teach variable level of complexity of translation.

However, Carbonell et al. does teach variable level of complexity of translation (col. 24 lines 23-45)

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to implement a variable level of complexity of translation of Carbonell et al. to the method of Schulz, because Carbonell et al. teaches that this will identify sentences that does not conform to specification and recognize grammatical constructions which will not parse, col. 24 lines 26-35.

As to claim 2, which depends on claim 1, Schulz teach further comprising the step of receiving said audio/video signal and said auxiliary information signal (col. 7 lines 7-25); separating said audio/video signal into an audio component and a video component (Figs. 1-2 and col. 5 lines 25-47); and filtering said text data from said

Art Unit: 2654

auxiliary information signal (Figs. 1-2 and col. 5 lines 43-55).

As to claim 3, which depends on claim 1, Schulz does not explicitly teach repeating term with different term of similar meaning.

However, Carbonell et al. does teach

wherein the step of sequentially analyzing said portions of text data includes the step of determining where a term present in said portion of text data under analysis is repeated and if the term is determined to be repeated, replacing the term with a different term of similar meaning in all occurrences after a first occurrence of the term (col. 10 lines 32-54).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to implement repeating term with different term of similar meaning of Carbonell et al. to the method of Schulz, because Carbonell et al. teaches that signals have to be analyzed since meaning lies under the surface of textual signals, col. 10 lines 35-40.

As to claim 4, which depends on claim 1, Schulz does not explicitly teach analyzing text data.

However, Carbonell et al. does teach

wherein the step of sequentially analyzing said portions of text data includes the step of determining whether one of a colloquialism and metaphor is present in said portion of text data under consideration, and replacing said ambiguity with standard terms representing the intended meaning (col. 10 lines 32-54).

Therefore, it would have been obvious to one of ordinary skill in the art at the

time of the invention to implement analyzing text data of Carbonell et al. to the method of Schulz, because Carbonell et al. teach that this will allow vocabulary items to reflect clear ideas and be appropriate for the target readership, col. 13 lines 55-56.

As to claim 5, which depends on claim 1, Schulz does not explicitly teach determining whether one of colloquialism and metaphor is present in translated text.

However, Carbonell et al. does teach further comprising the step of sequentially analyzing said portions of translated text data and determining whether one of a colloquialism and metaphor is present in said portions of translated text data, and replacing said ambiguity with standard terms representing the intended meaning (col. 10 lines 31-67 and col. 11 lines 31-65).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to implement determining whether one of colloquialism and metaphor is present in translated text of Carbonell et al. to the method of Schulz, because Carbonell et al. teach that colloquial terms can inhibit communication and that while not necessarily mandatory for MT-oriented processing, are nevertheless important guidelines for document production in general, col. 13 lines 55-57.

As to claim 6, which depends on claim 1, Schulz does not explicitly teach determining parts of speech of words.

However, Carbonell et al. does teach

wherein the step of sequentially analyzing said portions of text data includes the step of determining parts of speech of words in said portion of text data under consideration and displaying the part of speech with the displayed translated text data (col. 13 lines 1-15 and col. 22 lines 1-20).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to implement determining parts of speech of words of Carbonell et al. to the method of Schulz, because Carbonell et al. teach that this will allow for clarification of ambiguity, col. 22 lines 8-11.

As to claim 7, which depends on claim 1, Schulz does not explicitly teach cultural and historical knowledge database.

However, Carbonell et al. does teach further comprising the step of analyzing said portions of text data and said portions of translated text data by consulting a cultural and historical knowledge database and displaying the analysis results (col. 15 lines 45-67).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to implement cultural and historical knowledge database of Carbonell et al. to the method of Schulz, because Carbonell et al. teach that a knowledge-based machine translation must be supported by world knowledge and by linguistic semantic knowledge about meanings of lexical units and their combinations, col. 15 lines 45-50.

As to claim 8, which depends on claim 2, Schulz teach

wherein said text data is speech-to-text transcriptions in said video component (col. 5 lines 6-25 and Figs. 1-2).

As to claim 9, which depends on claim 2, Schulz teach  
wherein said synchronized audio/video signal is a radio/television signal, a satellite feed, a digital data stream or signal from a video cassette recorder (Figs. 1-2 col. 5 lines 25-42).

As to claim 10, which depends on claim 2, Schulz teach  
wherein said audio/video signal and said auxiliary information signal are received as an integrated signal and said method further comprises the step of separating the integrated signal into an audio component, a video component and an auxiliary information component (Figs. 1-2 and col. 5 lines 7-45).

As to claim 11, which depends on claim 10, Schulz teach  
wherein said text data is separated from other auxiliary data (col. 5 lines 10-25).

As to claim 12, which depends on claim 10, Schulz teach  
wherein said audio component, said video component and said auxiliary information component are synchronized (Figs. 1-2 and col. 5 lines 20-45).

As to claim 16, Schulz teach

An apparatus for processing an audio/video signal and an auxiliary information component comprising text data that is temporally related to the audio/video signal, said apparatus comprising:

one necessary filter for separating said signals into an audio component, a video component and related text data (Figs. 1-2);

a microprocessor for analyzing portions of said text data in an original language in which said text data is received, the microprocessor having software for translating said portions of text data and formatting the video component and related translated text data for synchronized output (Figs. 1-2 and col. 5 lines 1-17);

Schulz does not explicitly teach variable level of complexity of translation.

However, Carbonell et al. does teach variable level of complexity of translation (col. 24 lines 23-45)

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to implement a variable level of complexity of translation of Carbonell et al. to the method of Schulz, because Carbonell et al. teaches that this will identify sentences that does not conform to specification and recognize grammatical constructions which will not parse, col. 24 lines 26-35.

As to claim 17, which depends on claim 16, Schulz teach further comprising: a receiver for receiving said signals; and a filter for extracting text data from said auxiliary information component (col. 5 lines 25-45).

Art Unit: 2654

As to claim 18, which depends on claim 16, Schulz teach further comprising a memory for storing a plurality of language databases, wherein said language databases include a necessary metaphor interpreter (col. 5 lines 8-25).

As to claim 19, which depends on claim 1, Schulz teach necessary language database (col. 5 lines 1-15)

Schulz does not explicitly teach a thesaurus.

However, Carbonell et al. does teach wherein said language databases include a thesaurus (col. 18 lines 35-59).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to implement a thesaurus of Carbonell et al. to the apparatus of Schulz, because Carbonell et al. teaches that this will allow related words that might aid authors to reword sentencing, col. 18 lines 55-59.

As to claim 20, which depends on claim 18, Schulz does not explicitly teach storing a plurality of cultural/historical knowledge databases.

However, Carbonell et al. does teach wherein said memory further stores a plurality of cultural/historical knowledge databases cross-referenced to said language database (col. 15 lines 45-67).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to implement storing cultural/historical knowledge databases of Carbonell et al. to the apparatus of Schulz, because Carbonell et al. teach that a knowledge-based machine

translation must be supported by world knowledge and by linguistic semantic knowledge about meanings of lexical units and their combinations, col. 15 lines 45-50.

As to claim 21, which depends on claim 16, Schulz does not explicitly teach parser software for describing said portions of text data by stating its part of speech.

However, Carbonell et al. does teach

wherein the microprocessor further comprises parser software for describing said portions of text data by stating its part of speech, form and syntactical relationships in a sentence (col. 27 lines 35-57 and col. 28 lines 5-25).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to implement parser software for describing said portions of text data by stating its part of speech of Carbonell et al. to the apparatus of Schulz, because Carbonell et al. teaches that, will allow source and target languages to be selected while requiring minimal modifications to the computational structure, col. 27 lines 35-57.

As to claim 22, which depends on claim 16, Schulz does not explicitly teach determining whether one of a colloquialism and metaphor is present in said portion of text data under consideration.

However, Carbonell et al. does teach

wherein the microprocessor determines whether one of a colloquialism and metaphor is present in said portion of text data under consideration and said portions of translated text data,

and replaces said ambiguity with standard terms representing the intended meaning (col. 10 lines 32-54).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to implement determining whether one of a colloquialism and metaphor is present in said portion of text data under consideration of Carbonell et al. to the apparatus of Schulz, because Carbonell et al. teaches that this will allow vocabulary items to reflect clear ideas and be appropriate for the target readership, col. 13 lines 55-56, col. 13 lines 54-60 and col. 10 lines 41-44.

As to claim 26, Schulz teach

A receiver for processing a synchronized audio/video signal containing text data that is temporally related to said audio/video signal, said receiver comprising:  
input means for receiving said signal (Fig. 1);  
a microprocessor for analyzing said text data in an original language in which said signal was received (Figs. 1-2); and  
translating means for translating said text data into a target language (col. 5 lines 1-17);

and

Schulz does not explicitly teach variable level of complexity of translation.

However, Carbonell et al. does teach variable level of complexity of translation (col. 24 lines 23-45)

Therefore, it would have been obvious to one of ordinary skill in the art at the

Art Unit: 2654

time of the invention to implement the variable level of complexity of translation of Carbonell et al. to the process of Schulz, because Carbonell et al. teaches that this will identify sentences that does not conform to specification and recognize grammatical constructions which will not parse, col. 24 lines 26-35.

5. Claims 13-15 and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schulz (6,185,538) in view of Carbonell et al. (5,677,835), as applied to claims 1 and 16, in further view of Parry et al. (6,077,085).

As to claim 13, which depends on claim 1, Schulz in view of Carbonell et al. does not explicitly teach setting a personal preference level for determining the level of complexity of translation.

However, Parry et al. does teach further comprising the step of setting a personal preference level for determining the level of complexity of translation (col. 20 lines 30-55 and col. 2 lines 49-61).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to implement setting a personal preference level for determining the level of complexity of translation of Parry to the method of Schulz in view of Carbonell because an artisan with ordinary skill in the art would realize that this would maximize the student's learning efficiency using student specific activity sequencing (Parry, col. 20 lines 52-57).

As to claim 14, which depends on claim 13, Schulz in view of Carbonell et al. does not explicitly teach complexity of translation is automatically increased.

However, Parry et al. does teach wherein the level of complexity of translation is automatically increased based on a predetermined number of occurrences of similar terms (col. 12 lines 52-60 and col. 2 lines 49-61).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to implement complexity of translation is automatically increased of Parry to the method of Schulz in view of Carbonell because an artisan with ordinary skill in the art would realize that this would test and enhance comprehension of grammar, vocabulary or phrase memorization concepts, (Parry col. 11 lines 11-15).

As to claim 15, which depends on claim 1, Schulz in view of Carbonell et al. does not explicitly teach the complexity of translation is automatically increased on a predetermined period of time.

However, Parry et al. does teach wherein the complexity of translation is automatically increased on a predetermined period of time (col. 15 lines 55-67, Fig. 8, and col. 2 lines 49-61).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to implement the complexity of translation is automatically increased on a predetermined period of time of Parry to the method of Schulz in view of Carbonell because an artisan with ordinary skill in the art would realize that this would determine how well the student knows the concepts associated with a given item, (Parry col. 15 lines 55-67).

As to claim 23, which depends on claim 1, Schulz in view of Carbonell et al. does not explicitly teach setting a personal preference level for determining a level of difficulty.

However, Parry et al. does teach

wherein the microprocessor sets a personal preference level for determining a level of complexity of translation (col. 20 lines 30-55 and col. 2 lines 49-61).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to implement setting a personal preference level for determining a level of difficulty of Parry to the method of Schulz in view of Carbonell because an artisan with ordinary skill in the art would realize that this would maximize the student's learning efficiency using student specific activity sequencing, (Parry col. 20 lines 52-57).

As to claim 24, which depends on claim 13, Schulz in view of Carbonell et al. does not explicitly teach automatically increases the level of complexity of translation.

However, Parry et al. does teach

wherein the microprocessor automatically increases the level of complexity of translation based on a predetermined number of occurrences of similar terms (col. 12 lines 52-60 and col. 2 lines 49-61).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to implement the automatically increases the level of complexity of translation of Parry to the method of Schulz in view of Carbonell because an artisan with ordinary skill in the art would realize that this would test and enhance comprehension of grammar, vocabulary or phrase memorization concepts, (Parry col. 11 lines 11-15).

As to claim 25, which depends on claim 1, Schulz in view of Carbonell et al. does not explicitly teach automatically increases the level of complexity of translation based on a predetermined period of time.

However, Parry et al. does teach wherein the microprocessor automatically increases the level of complexity of translation based on a predetermined period of time (col. 15 lines 55-67, Fig. 8, and col. 2 lines 49-61).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to implement automatically increases the level of complexity of translation based on a predetermined period of time of Parry to the method of Schulz in view of Carbonell because an artisan with ordinary skill in the art would realize that this would determine how well the student knows the concepts associated with a given item, (Parry col. 15 lines 55-67).

### *Conclusion*

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure see PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Myriam Pierre whose telephone number is 571-272-7611. The examiner can normally be reached on Monday - Friday from 5:30 a.m. - 2:00p.m.

7. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on (571) 272-7602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2654

8. Information as to the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

11/28/2005 MP

*Vijay Chawan*  
VIJAY CHAWAN  
PRIMARY EXAMINER